What we claim is:

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1. A switch having a network management protocol mounted thereon comprising:

an agent for detecting a line fault and for notifying line fault information to a calling side by a trap signal.

2. A switch having a network management protocol mounted thereon comprising:

an agent for receiving line fault information by a trap signal, and a line manager for specifying a line on which a fault has occurred based on the line fault information from the agent and for switching over to a predetermined alternate line.

- 3. The switch as claimed in claim 1 wherein the line fault comprises a line fault detected by a network-to-network protocol.
- 4. The switch as claimed in claim 2 wherein the line manger manages a line based on an interface with a network-to-network protocol, the line fault information comprises information of a line fault detected by the network-to-network protocol, and a line is switched over to a network-to-network alternate line based on the trap signal.
- 20 5. The switch as claimed in claim 2, further comprising a path manager for setting up an alternate line of a path based on the line fault information.